

## EAST Search History

S11	11043	variable adj valve	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/07/20 16:52
S12	5	S10 and S11	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/07/20 16:53
S13	4	("4009695"   "4466392"   "5349929"   "6330870").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/07/20 16:56
S14	30	"5447138"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/08/20 11:08
S15	7	"6340016"	USPAT	OR	OFF	2007/07/23 17:15
S16	28	"5447138"	USPAT	OR	OFF	2007/08/20 11:14
S17	4	"0889224"	EPO; DERWENT	OR	OFF	2007/08/20 11:15
S18	8	"6340016"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/08/20 11:16
S19	57	("3628510"   "4009695"   "4205650"   "4364343"   "4495924"   "4694799"   "5074263"   "5687682"   "5713334"   "5724950"   "5836288").PN. OR ("6098585"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/20 11:23
S20	4	("7104235").URPN.	USPAT	OR	OFF	2007/08/20 11:44
S21	997	123/179.3,179.4.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/08/20 14:49
S22	2	ramp.ab. and S21	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/08/20 11:45
S23	6	("20050224047"   "20050279324"   "5613474"   "6366049"   "7028657"   "7072759").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/20 11:46

## EAST Search History

S24	19	123/179.3,179.4.ccls. and run adj up	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/08/20 14:49
S25	5	123/179.3,179.4.ccls. and runup	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/08/20 14:49
S26	22	S24 S25	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/08/20 14:50
S27	8	("5115183"   "5785138"   "6035626"   "6102144"   "6202776"   "6425839"   "6453863").PN. OR ("6615785").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/20 14:57

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	"20070079782"	US-PGPUB	OR	OFF	2007/07/20 16:20
S2	993	123/179.3,179.4.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/07/20 16:20
S3	249119	(before priour) with start\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/07/20 16:21
S4	331686	(before prior) with start\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/07/20 16:22
S5	331686	S3 S4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/07/20 16:22
S6	422	S2 and S5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/07/20 16:24
S7	110	piston and S6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/07/20 16:24
S8	10	("4009695"   "4364343"   "4462348"   "5495127"   "6050232"   "6098585"   "6125808"   "6334417"   "6357409"   "6418899").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/07/20 16:42
S9	13	("20030101956"   "20030121487"   "20040055553"   "4462348"   "5485127"   "5495127"   "6050232"   "6098585"   "6588397"   "6647955"   "6681173"   "6718928"   "6807934").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/07/20 16:51
S10	312	S6 not S7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/07/20 16:52

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S27	8	("5115183"   "5785138"   "6035626"   "6102144"   "6202776"   "6425839"   "6453863").PN. OR ("6615785").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/20 14:57